

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the application:

1. – 2. (Cancelled)

3. (Previously Presented) An apparatus for use in a wellbore, comprising:
an element formed of a superplastic material to perform a predetermined
downhole task; and
a component including an anchor actuatable by the element.

4. (Cancelled)

5. (Previously Presented) An apparatus for use in a wellbore, comprising:
an element formed of a superplastic material to perform a predetermined
downhole task,
wherein the element includes a sand screen.

6. (Previously Presented) An apparatus for use in a wellbore, comprising:
an element formed of a superplastic material to perform a predetermined
downhole task; and
a shock absorber including the element.

7. (Previously Presented) An apparatus for use in a wellbore, comprising:
an element formed of a superplastic material to perform a predetermined
downhole task; and
a releasable connector mechanism including the element.

8. (Previously Presented) An apparatus for use in a wellbore, comprising:
an element formed of a superplastic material to perform a predetermined
downhole task; and
an explosive component including the element.

1 9. (Original) The apparatus of claim 8, wherein the explosive component includes a
2 shaped charge.

1 10. (Previously Presented) An apparatus for use in a wellbore, comprising:
2 an element formed of a superplastic material to perform a predetermined
3 downhole task; and
4 a weak point connector including the element.

1 11. (Previously Presented) An apparatus for use in a wellbore, comprising:
2 a carrier line; and
3 a tool carried by the carrier line for deployment into the wellbore, comprising:
4 an element formed of a superplastic material to perform a predetermined
5 downhole task; and
6 a heating device to heat the element to a temperature sufficient to cause
7 the element to exhibit superplastic behavior.

1 12. – 27. (Cancelled)

1 28. (Currently Amended) ~~The apparatus of claim 27,~~ An apparatus for use in a
2 wellbore, comprising:
3 an element formed of a superplastic material to perform a predetermined
4 downhole task; and
5 a component including a seal engageable with the element, wherein the element is
6 adapted to translate the seal into engagement with a downhole structure, wherein the apparatus
7 comprises a packer.

1 29. (Currently Amended) ~~The apparatus of claim 27,~~ An apparatus for use in a
2 wellbore, comprising:
3 an element formed of a superplastic material to perform a predetermined
4 downhole task; and
5 a component including a seal engageable with the element, wherein the element is
6 adapted to translate the seal into engagement with a downhole structure, wherein the apparatus
7 comprises a patch.

1 30. (Currently Amended) ~~The apparatus of claim 27, further comprising An~~
2 apparatus for use in a wellbore, comprising:
3 an element formed of a superplastic material to perform a predetermined
4 downhole task;
5 a component including a seal engageable with the element, wherein the element is
6 adapted to translate the seal into engagement with a downhole structure; and
7 a carrier line and a tool carried by the carrier line for deployment into the well,
8 wherein the tool comprises the element formed of the superplastic material and the component
9 including the seal, the tool further comprising a heating device to heat the superplastic material
10 to a temperature such that the element exhibits superplastic behavior.

1 31. (Previously Presented) The apparatus of claim 30, further comprising a piston
2 adapted to cause translation of the element.

1 32. (Previously Presented) An apparatus for use in a wellbore, comprising:
2 an element formed of a superplastic material to perform a predetermined
3 downhole task;
4 a component including a seal engageable with the element, wherein the element is
5 adapted to translate the seal into engagement with a downhole structure; and
6 a heating device to heat the superplastic material to a temperature such that the
7 element exhibits superplastic behavior,
8 wherein the heating device comprises a propellant.

1 33. (Currently Amended) ~~The apparatus of claim 2, further comprising~~ An apparatus
2 for use in a wellbore, comprising:

3 an element formed of a superplastic material to perform a predetermined
4 downhole task;

5 a component including a seal engageable with the element; and
6 a conduit, wherein the element comprises a plug to block fluid flow in a bore of
7 the conduit.

1 34. (Previously Presented) An apparatus for use in a wellbore, comprising:

2 an element formed of a superplastic material to perform a predetermined
3 downhole task;

4 a component including a seal engageable with the element;

5 a conduit, wherein the element comprises a plug to block fluid flow in a bore of
6 the conduit; and

7 a port to communicate fluid pressure to deform the plug inwardly to enable
8 movement of the plug.

1 35. (Previously Presented) The apparatus of claim 3, wherein the component
2 comprises a packer including the anchor.

1 36. (Previously Presented) The apparatus of claim 35, wherein the packer further
2 comprises a seal,

3 wherein the element comprises one or more sleeves attached to the anchor and the
4 seal, the one or more sleeves adapted to translate the anchor and seal into engagement with a
5 downhole structure.

1 37. (Previously Presented) An apparatus for use in a wellbore, comprising:
2 a carrier line; and
3 a tool carried by the carrier line for deployment into the wellbore, comprising:
4 an element formed of a superplastic material to perform a predetermined
5 downhole task,
6 wherein the element is selected from the group consisting of a casing, a
7 liner, a tubing, and a pipe; and
8 a heating device to heat the element to a temperature such that the element
9 exhibits superplastic behavior.

1 38. (Previously Presented) The apparatus of claim 5, further comprising a heating
2 device to heat the sand screen to a temperature such that the sand screen exhibits superplastic
3 behavior.

1 39. (Previously Presented) An apparatus for use in a wellbore, comprising:
2 an element formed of a superplastic material to perform a predetermined
3 downhole task; and
4 a heating device to heat the element to a temperature sufficient to cause the
5 element to exhibit superplastic behavior,
6 wherein the heating device comprises a propellant.

1 40. – 41. (Cancelled)

1 42. (Previously Presented) An apparatus for use in a wellbore, comprising:
2 an element formed of a superplastic material to perform a predetermined
3 downhole task;
4 a junction seal assembly comprising the element; and
5 a heating device to heat the element to a temperature sufficient to cause the
6 element to exhibit superplastic behavior,
7 wherein the heating device comprises a propellant.

1 43. (Previously Presented) The apparatus of claim 42, wherein the element comprises
2 one of a tubing and pipe to be inserted into a lateral wellbore.

1 44. (Currently Amended) The apparatus of claim [[2]] 5, wherein the superplastic
2 material exhibits elongation to failure in excess of 200%.

1 45. (Currently Amended) The apparatus of claim [[2]] 5, wherein the superplastic
2 material has a fine equi-axed grain structure that remains stable during deformation.

1 46. (Previously Presented) The apparatus of claim 45, wherein a grain size of the fine
2 equi-axed grain structure is in a range of 2 to 10 micrometers.

1 47. (Previously Presented) The apparatus of claim 3, wherein the superplastic
2 material exhibits elongation to failure in excess of 200%.

1 48. (Previously Presented) The apparatus of claim 3, wherein the superplastic
2 material has a fine equi-axed grain structure that remains stable during formation.

1 49. (Previously Presented) The apparatus of claim 48, wherein a grain size of the fine
2 equi-axed grain structure is in a range of 2 to 10 micrometers.